



United States General Accounting Office

Report to Congressional Requesters

July 2001

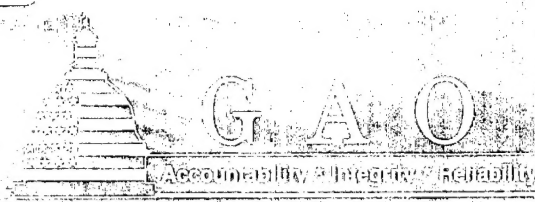
KOSOVO AIR OPERATIONS

Need to Maintain
Alliance Cohesion
Resulted in Doctrinal
Departures



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GAO-01-734

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Abbreviations

DOD	Department of Defense
NATO	North Atlantic Treaty Organization



United States General Accounting Office
Washington, DC 20548

July 27, 2001

The Honorable Bob Stump
Chairman, Committee on Armed Services
House of Representatives

The Honorable John P. Murtha
Ranking Minority Member
Subcommittee on Defense
Committee on Appropriations
House of Representatives

Following Operation Allied Force, the North Atlantic Treaty Organization's (NATO) 1999 air operation against the Federal Republic of Yugoslavia (Yugoslavia), numerous high level U.S. military officials¹ stated that U.S. military doctrine² had not been followed and that not doing so had impeded military operations and increased risk to alliance forces.³ Doctrine is defined as the principles that shape the way the military thinks about and trains for warfare. The U.S. military believes that its doctrine provides a common perspective for planning and conducting effective and efficient military operations. This report is one of a series associated with the conduct of Operation Allied Force (see Related GAO Products at the end of this report). This report, as you requested, addresses the following objectives: (1) What were the significant departures from U.S. military doctrine in Operation Allied Force and why did they occur? (2) What recent actions has the Department of Defense (DOD) taken to address doctrinal issues related to the U.S. military's participation in the operation?

To answer our first objective, we identified significant doctrinal departures through our review of DOD and service documents and

¹ Some of these U.S. military officials concurrently held positions in the NATO military structure during Operation Allied Force.

² Unless otherwise noted, all references to doctrine refer to U.S. service and joint military doctrine. Most doctrine related specifically to air operations originates from the Air Force and is integrated in joint doctrine. Joint doctrine may not always be as specific as doctrinal concepts specified in service doctrine.

³ The Federal Republic of Yugoslavia is a federation of the republics of Serbia and Montenegro. Kosovo and Vojvodina are provinces of Serbia.

discussions with principal U.S. military officials in organizations such as the U.S. European Command, the Joint Task Force Noble Anvil,⁴ and the NATO Combined Air Operations Center.⁵ To answer our second objective, however, we focused on a wider range of doctrinal issues, drawing upon DOD reviews of the lessons learned from the operation and the status of actions taken to address those lessons.

Results in Brief

We identified seven significant departures from U.S. military doctrine during Operation Allied Force. These departures ranged from not having clear and attainable objectives to not following various principles associated with conducting an air campaign to not having a fully functional command structure. These doctrinal departures were largely the result of the NATO alliance's desire to maintain alliance cohesion. To maintain cohesion, the alliance initially adopted an operation of limited scope and duration with vague objectives, and it emphasized avoiding collateral damage and alliance force casualties. The vague and less decisive objectives were not easily attainable through military means as recommended in doctrine. Limiting the scope of the campaign prevented the military from targeting as called for in doctrine. In addition, concern about collateral damage did not allow the military to strike vital targets in as decisive a manner as recommended in doctrine. The alliance's desire to avoid casualties led it to exclude the use of alliance ground forces. Without alliance ground forces to draw out enemy forces, finding, identifying, and targeting Yugoslavian ground forces from the air in a doctrinal manner were more difficult tasks. Finally, the belief that the operation would be of short duration led to a joint task force that was not formed according to doctrine. The NATO alliance members remained united throughout the operation, perhaps because of these doctrinal departures. However, many U.S. participants in the operation believed that these departures resulted in a longer campaign, more damage to Yugoslavia, and greater risk to alliance forces than likely would have occurred if doctrine had been followed.

DOD has taken actions to address shortcomings in strategic, operational, and tactical doctrine as a result of Operation Allied Force. For example, DOD recently issued a new doctrine publication dedicated to providing

⁴ Joint Task Force Noble Anvil controlled the employment and integration of U.S. assets into Operation Allied Force and was responsible for all NATO targeting.

⁵ The Combined Air Operations Center planned, directed, and executed the NATO air operation in support of Operation Allied Force.

guidance for multinational operations. Its primary aims are to convey the fundamentals of multinational operations, such as command relationships, and the factors affecting the planning and execution of these operations, including those concerning political, linguistic, cultural, and sovereignty issues. In addition, a number of Air Force publications have been revised to reflect lessons learned from the Air Force's assessment of the air campaign. For example, the Air Force found little information in doctrine publications that described how to tie selected targets to intended effects, and it determined that the concept needed to be addressed formally through doctrine. Consequently, Air Force doctrine is being revised. In addition, shortly after the close of Operation Allied Force, the Joint Chiefs of Staff collected lessons learned from the military services, commands, and other DOD agencies. This effort led to a number of changes to existing joint doctrine as well as the development of new joint doctrine publications, many related to tactical operations. For example, because commanders did not have adequate information on the status of shipped items, their ability to manage resources was impeded. After the operation, many joint doctrine publications were revised to ensure that the commanders receive timely and complete resource data.

Despite the many activities under way in DOD and the services to study these doctrinal issues and adjust military doctrine, we offer some observations for decision-makers to consider about the conduct of military operations in a multinational environment.

Background

The NATO alliance, which consists of the United States and 18 additional nations, began air strikes on the Federal Republic of Yugoslavia on March 24, 1999. (Appendix I contains a timeline of events during the planning and execution of Operation Allied Force.) This military campaign was the largest combat operation in NATO's 50-year history. The NATO alliance initially adopted a limited response envisioned to be a 2-day air strike. The NATO alliance planned to use air strikes as a means to compel President Milosevic to cease the violence in Kosovo and allow all refugees to return to their homes, which would restore peace throughout the Balkan region. (Appendix II provides a further description of the political and military objectives of Operation Allied Force.) When the initial attacks did not achieve NATO's objectives, the air campaign gradually grew in intensity to an around-the-clock air combat operation, which lasted for 78 days. The United States was a major participant in this NATO-led operation. The United States provided about 70 percent of the aircraft to the operation and over 60 percent of the total sorties during the operation.

The 19 NATO member nations have disparate histories and interests, and this led to varied support for this operation, which was outside of NATO's central mission to provide for the collective defense of its members. The 19 NATO member nations are shown in appendix III. For example, one member nation, which shared religious and cultural backgrounds with the Kosovar Albanians, was sympathetic to their plight, while another nation had historic and religious ties to the Serbian Yugoslavs. Another NATO nation was led by a coalition government, where part of the coalition supported the NATO alliance operation while the other part of the coalition did not want the bombing campaign to continue and said that it would withdraw from the government if the NATO alliance used a ground force. Even within the United States, there was not a consensus of support for this operation.⁶ Although the three newest members of the NATO alliance supported the operation, the level of support expressed by their governments varied.⁷ For example, although one nation offered NATO forces the use of its air space and military airfields, it was concerned about Yugoslavian retaliation against a minority population in Yugoslavia that was ethnically related to this nation.

Military doctrine provides the fundamental principles of how best to employ the national military power to achieve strategic, operational, and tactical ends. Each of the U.S. services has doctrine to guide the employment of its forces, and the military has joint doctrine for operations involving two or more services. Joint doctrine takes precedence over individual service doctrine, and service doctrine must be consistent with joint doctrine. Joint doctrine states that when the United States participates in multinational operations, U.S. commanders should follow multinational doctrine and procedures that have been ratified by the United States. Multinational operations are conducted by forces of two or more nations within the structure of an alliance or a coalition. An alliance is the result of formal agreements between two or more nations for broad, long-term objectives, such as NATO. A coalition is a special arrangement between two or more nations for a common action, such as the nations involved in the 1991 Persian Gulf War against Iraq. NATO is currently

⁶ For example, the U.S. Senate passed a resolution (S. Con. Res. 21) authorizing military air operations and missile strikes against Yugoslavia on March 23, 1999 (58 for, 41 against). This resolution failed passage in the U.S. House of Representatives on April 28, 1999 (213 for, 213 against).

⁷ The newest members of NATO – the Czech Republic, Hungary, and Poland – became full members of NATO less than 2 weeks prior to the start of Operation Allied Force.

developing allied joint doctrine, which is applicable to NATO-led multinational forces conducting operations involving more than one service.

While doctrine represents the preferred approach to employing military power, doctrine does not replace or alter a commander's authority or obligation to determine the proper course of action for a specific operation or battle.⁸ At the same time, the military is subject to civilian command and control at all times; therefore, decisions made by political leaders supercede doctrinal guidance, even if those decisions conflict with doctrine. Doctrine continually evolves based on the experience and outcome of military exercises and operations and changes in technology.

There are three levels of war – strategic, operational, and tactical. At the strategic level, a nation determines security objectives and guidance and develops and uses resources to achieve these objectives. The operational level of war is the level at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within theaters or areas of operations. At the tactical level of war, battles and engagements are planned and executed to accomplish military objectives assigned to tactical units or task forces.

Politically Constrained Environment Resulted in Departures From Doctrine

Based on discussions with prominent officials who participated in the operation and on DOD and service reports documenting the doctrinal departures, we identified seven areas in which significant departures from military doctrine occurred during Operation Allied Force. The departures from doctrine ranged from not having clearly defined and attainable military objectives to not following various principles associated with conducting air operations (from targeting to conducting strikes) to not having a fully functional command structure. The departures were caused in large part by the NATO alliance's adoption of an operation of limited scope, a great emphasis on avoiding collateral damage and alliance casualties, and a desire to achieve its goals within a short time frame to ensure alliance cohesion. While alliance members remained united and achieved success in the operation, many U.S. military officials believed that these departures resulted in a longer campaign, more damage to Yugoslavia, and greater risk to alliance forces than likely would have occurred if doctrine had been followed.

⁸ An operation is an arrangement of battles to achieve objectives. A battle is a series of related encounters with an enemy's force.

Significant Departures
from Doctrine Involved
Aspects of Planning and
Executing an Air
Operation

Table 1 summarizes the seven doctrinal areas we identified and the manner in which Operation Allied Force departed from them.

Table 1: Significant Departures in Doctrine During Operation Allied Force

Doctrine	Departure from doctrine
Clear military objectives: Military operations should be directed toward a clearly defined, decisive, and attainable objective. Objectives require an end state (required conditions that show that the stated objectives were achieved). In addition, guidance should be given to all personnel engaged in the operation to provide the commander's plan for attaining the objectives. Objectives, an end state, and guidance should be provided at the start of an operation.	Initial objectives were not clearly defined and militarily attainable. The end state was not provided until about 30 days into the operation. Formal commander's guidance for achieving campaign goals was not provided until approximately 6 weeks into the operation, which limited the military's ability to identify the effects it should achieve.
Strategic attack: Operations should strike the enemy's vital interests such as command elements, war production assets, and key supporting infrastructure.	The military was not allowed initially to use overwhelming forces to attack many of the enemy's vital interests. Some examples of vital interests that could not be decisively attacked were roads and bridges, electrical power grids, command and control facilities, fuel storage facilities, and transportation networks. Initial targets focused on airfields, air defense and communication centers, military barracks, and some equipment production centers.
Effects-based planning and operations: Operations should be designed to generate the type and extent of effects necessary to create outcomes that will realize the commander's objective.	The lack of clear, consistent guidance initially limited the military's ability to plan for effects. Air operation officials stated that targets were struck in a less systematic manner than needed to achieve measurable effects because, in part, targets were approved individually instead of as a package.
Mass and parallel operations: Forces should be concentrated and used simultaneously against varied target sets (i.e., bridges, communications systems, and electrical power supply). This approach is intended to shock, disrupt, and overwhelm the enemy.	Sporadic approval of targets limited the military's ability to apply concentrated effects of combat power and to simultaneously attack multiple targets.
Air interdiction: Air operations (i.e., bombing and shooting) should destroy, delay, or neutralize an enemy ground force. This is usually done in support of friendly ground forces.	Air interdiction was done without using alliance ground forces to draw out the enemy, which made it difficult to find and destroy mobile targets.
Target approval: The military commander will approve individual targets and determine target priorities, levels of effort, and the sequencing of those efforts, based on guidance from political leadership and higher military authorities.	Initially, political leadership and high level military command provided approval of individual fixed targets, and even by the end of the operation, the military commanders were only allowed to approve fixed, military-related targets with estimated low levels of collateral damage.
Formation and organization of a joint task force: A joint task force should be representative of the force that is participating and trained to be effective.	Joint Task Force Noble Anvil was not staffed with people representative of the force that was participating nor was the staff trained to conduct combat operations.

Source: GAO analysis.

Doctrinal Departures Were Largely the Result of Need to Maintain Alliance Cohesion

The need to build and keep a political consensus among the NATO alliance members led to many of the departures from military doctrine. Various alliance members were concerned about inflicting undue punishment on Yugoslavian civilians, incurring the cost of rebuilding Yugoslavian infrastructure, or turning public opinion against the operation. To balance these concerns and to ensure support to begin the operation, the alliance adopted objectives that were not clearly defined and limited the campaign's scope, the potential for collateral damage and allied force casualties, and the duration of the operation. The vague objectives adopted by NATO were difficult for the military to attain. The limited scope of the campaign as well as concerns about collateral damage affected the target approval process and made it difficult to conduct strategic attack, effects-based planning, and mass and parallel operations as described in doctrine. Concerns about alliance force casualties diminished the effectiveness of air interdiction operations, and the assumption that the campaign would be of short duration caused problems in forming the joint task force.

Unclear Objectives

The vague objectives were not easily attainable by the military as recommended in doctrine. For example, one goal of the alliance's action was to stop the violence against the Kosovars and institute a peaceful solution by "contributing to the response of the international community." According to U.S. military officials, it was difficult to translate these objectives into a clear, attainable military plan, particularly during the first few weeks of the campaign. Since the goals of the military action were not to defeat the Yugoslavian leadership but to get it to stop the violence and reach a peace agreement, it was unclear how to achieve the goals with air operations. Several officials stated that the NATO alliance's objective of demonstrating resolve led initially to approved targets that were selected to show that the NATO alliance was serious rather than tied to a coherent military plan. It was not until the objectives were clearer with defined end states, about 1 month into the operation, that the military leaders developed guidance that could be translated into a coherent campaign.

Limited Scope

The alliance's decision to limit the scope of the campaign by initially using minimum force in achieving its objectives prevented the military from targeting what it considered some of the enemy's vital interests during the early stages of the campaign as called for by strategic attack doctrine. The alliance decided that it would use an incremental air campaign, which would strike Yugoslavia in a carefully controlled way in the hope that the initial strikes would quickly convince Yugoslavian President Milosevic of the NATO alliance's determination, causing him to back down and accept its terms. If the alliance's terms were not accepted, it would gradually

escalate the intensity of the air campaign. For example, the alliance approved only about 50 carefully chosen military targets prior to the campaign. The alliance expected to strike these initial targets, which were mostly air defense systems, within 2 days. There were no targets approved for locations in downtown Belgrade to avoid the appearance of conducting a war against the people of Yugoslavia. Senior military commanders wanted to focus strikes on targets in downtown Belgrade, which they believed would be more likely to influence Yugoslavia's leadership to accept the alliance's terms. One high ranking military commander involved in the air operation stated that he would have destroyed the bridges across the Danube and would have hit five or six political-military headquarters in downtown Belgrade immediately. According to the official, the way to achieve the NATO alliance's objectives would have been to disable the Serb leadership as rapidly and as decisively as possible. Instead, according to this and other U.S. military officials, political pressures from the alliance led to a selection of scattered targets.

Collateral Damage Concerns

To ensure that collateral damage was limited, alliance members were involved in the approval of individual fixed targets, which was not consistent with military doctrine.⁹ The alliance emphasized avoiding collateral damage because it was concerned that unfavorable public opinion could fracture the alliance. According to doctrine, the military commander of the operation would have much more discretion in selecting and prioritizing the individual targets to be struck. However, alliance members wanted to review individual targets to assess the potential for collateral damage and the sensitivity of the targets. This approach led to reviews by multiple levels of command above the commanding general that often included reviews by the U.S. National Command Authorities, NATO's North Atlantic Council, and some individual alliance members. This cumbersome review process often took an additional 2 weeks to get individual targets approved. A Center for Naval Analysis report on targetting stated that of 778 fixed targets that were approved by the commanding general, 495, or about 64 percent, required a higher level of approval. At the end of the operation, over 150 targets were still waiting approval. The high level concern about collateral damage also led to some approved targets being canceled, which caused some missions to be canceled at the last minute or aborted while aircraft

⁹ The commanding general had the authority to approve fixed targets that would potentially cause less than 20 civilian casualties and mobile targets. This authority was only given to him later in the operation.

were en route. Several senior Air Force officials believed this led to an inefficient use of assets.

Officials at the air operation center stated that the high level approval process also led to approved targets being provided on a sporadic basis, which limited the military's ability to achieve planned effects and mass and parallel operations as recommended in doctrine. For example, to achieve the effect of stopping production of an oil refinery, one official said that several targets were identified and submitted for approval. However, the approval was provided only for some of those targets, which reduced the effectiveness of the strike since the refinery was not totally disabled. Moreover, several officials said that the process could not produce enough targets in a timely manner for the number of aircraft involved to conduct parallel and simultaneous operations as called for in mass and parallel attack doctrine.

Casualty Concerns

In an attempt to reduce public concern about the potential of allied casualties, the NATO alliance publicly stated that it would not use ground forces by directing its militaries not to plan for a ground phase of the campaign. This limitation made it difficult for air forces to find and target enemy ground forces without the use or threat of use of supporting ground forces, as preferred in military doctrine. U.S. military officials familiar with the air interdiction operations against the Yugoslavian army stated that they were not prepared to conduct these operations without the support of ground forces. To conduct air interdiction without ground forces necessitated air planners to develop tactics for locating mobile targets without the assistance of ground forces who normally perform the mission. Finding targets was also difficult because the Yugoslavian forces were able to disperse since they did not have to mass to prepare to encounter allied ground forces.

Targeting enemy ground forces was further complicated by concerns that alliance aircraft were vulnerable to enemy anti-aircraft weapons that could be launched from ground sites. As a result, alliance aircraft were initially restricted from flying below 15,000 feet. While this restriction reduced the risk for alliance casualties, it made it more difficult to positively identify enemy targets. Later in the operation, the altitude restriction was lowered in Kosovo to allow aircrews to more accurately identify mobile targets in order to reduce the potential for collateral damage.

Short Duration Expected

Based on the NATO alliance's previous experience during Deliberate Force¹⁰ and earlier threats of air strikes in 1998, alliance members believed that only a few days of strikes would be necessary to get the Yugoslavian leader to comply with the alliance's demands. Some senior U.S. officials indicated that they doubted that the air campaign would have ever begun if some alliance members believed it was going to take almost 3 months to complete the operation. The expected short duration of the campaign may have ensured the alliance's support, but it complicated the planning for the operation and led to doctrinal departures.

The formation of Joint Task Force Noble Anvil, which oversaw much of the operation, was a prominent example of how the expectation of a short campaign caused departures in doctrine. Because a short campaign was anticipated, the joint task force was not staffed with people trained to conduct combat operations, nor was it established with all the functional areas that normally comprise a joint task force. For example, the task force's commander decided that it would be more expedient to use staff primarily from U.S. Naval Forces Europe, although some of these officials have described their peacetime role as administrative and most of these personnel had little experience in conducting combat operations. As a result, the joint task force staff was receiving on-the-job combat training at the same time they were planning the air campaign. Officials also stated that the short campaign assumption was a factor in using primarily naval personnel to be the core of the joint task force rather than being representative of the services participating in the operation as recommended in doctrine. Since the commander of the joint task force also commanded U.S. Naval Forces Europe, it was more expedient to use this headquarters staff for the joint task force. Some air operations officials stated that by not having more senior officials trained in air operations in the joint task force, it took weeks for the joint task force to become an efficient organization. Also, certain functional areas of the task force, such as intelligence and planning, were not initially formed because those functional areas would not have been needed in a short campaign where the targets had already been identified and approved. Once it became apparent that the operation would last longer than a few days, officials stated they had to concurrently complete the formation of the joint task force and oversee the operation, an approach that was less than optimal.

¹⁰ Deliberate Force was the 21-day 1995 NATO Balkan air campaign against Bosnians of Serbian ethnicity supported by President Milosevic.

Senior U.S. Officials Cited Several Overall Effects of Doctrine Departures

U.S. officials cited several overall effects that doctrine departures had on the execution of Operation Allied Force. The effects mentioned were a lengthened campaign, additional damage to Yugoslavia, and increased risk to alliance participants. Several officials believed that not following doctrine likely lengthened the campaign. While their estimates varied, some senior officials estimated that the campaign was 2-3 times longer than it would have been without these concerns. One official estimated that it is likely that a more decisive campaign would have lasted a few weeks rather than almost 3 months if one of the initial plans developed by the United States, which adhered to accepted military doctrine, had been adopted.¹¹ These estimates were largely based on the belief that the incremental campaign adopted by NATO gave the Yugoslavian forces the opportunity to adjust to the offensive and possibly led the Milosevic government to underestimate the alliance's determination. In addition, other officials thought that the incremental campaign may have led to more overall damage to Yugoslavia. They believed that some targets of limited military value would not have been struck if overwhelming force on Yugoslavia's vital interests was used at the outset of the operations. Some officials also cited an increased risk to alliance forces because of the decision to pursue targets of limited military value, such as previously damaged targets and dispersed enemy fielded forces. Because Yugoslavia's air defenses had not been destroyed, alliance pilots were at risk every time they had to enter any part of Yugoslavia. One high ranking official indicated that it was not uncommon for 15 sorties¹² to be needed to destroy one enemy tank.

Recent DOD Actions Address Wide Range of Doctrinal Issues

DOD has taken a number of actions that address doctrinal issues, including many of those addressed in the previous section.¹³ DOD's recently issued joint publication for multinational operations conveys more detailed guidance than had been previously available to commanders. Although not available prior to Operation Allied Force, commanders now have available a more detailed discussion on the strategic context of multinational operations, as well as command relationships and considerations for planning and execution of operations conducted within the structure of an alliance. After assessing its

¹¹ Prior to the start of Operation Allied Force, U.S. military planners developed a number of plans for conducting combat operations against Yugoslavia.

¹² A sortie is one mission or attack by a single plane.

¹³ In some instances, doctrine was deemed sufficient but was not followed.

participation in Operation Allied Force, the Air Force identified a number of problematic issues relating to service and joint doctrine and subsequently revised a number of its doctrine publications. Additionally, the Joint Chiefs of Staff, in concert with other services, is considering whether issues related to targeting, strategic attack, and effects-based operations should be addressed in joint doctrine. Finally, during the closing days of Operation Allied Force, the Joint Chiefs of Staff collected lessons learned from the military services, commands, and other DOD agencies as a result of their participation in the operation. An assessment of these lessons learned resulted in a number of changes to joint doctrine.

New Joint Doctrine Publication Focuses on Operations with Other Nations

In April 2000, DOD published its *Joint Doctrine for Multinational Operations*, which was being developed prior to and at the time of Operation Allied Force. This publication provides commanders with more detailed guidance on these operations and is consistent with NATO doctrine across the full range of operations, from combat to humanitarian assistance. Its primary aims are to convey the fundamentals of multinational operations, command relationships, and considerations to be addressed during the planning and execution of these operations, including factors concerning political, linguistic, cultural, and sovereignty issues. Military commanders should expect a high level of political involvement in the future, regardless of whether the multinational operation involves war, a mission other than a large-scale war, or a peacetime engagement. The Joint Chiefs of Staff believes the multinational operations doctrine is a major step forward in the development of joint doctrine and for the integration of future multinational forces.

Air Force Takes Action to Improve Operational Doctrine

The Air Force, a major U.S. participant in Operation Allied Force, completed two reviews of the operation. First, *The Air War Over Serbia: Aerospace Power in Operation Allied Force* provides the Air Force's perspective on its participation in the air war. By assessing its participation, the Air Force hoped to determine what it needs to do better in the future and to decide how it can best organize, train, and equip to meet future requirements. The second, the Operation Allied Force Doctrine Summit, was specifically convened to assess the strategic- and operational-level doctrinal issues arising from the Air Force's participation in Operation Allied Force.

As a result of these assessments, the Air Force identified a number of issues that needed to be addressed in both Air Force and joint doctrine. Consequently, the Air Force is revising a number of its doctrine publications. For example, the Air Force identified problems that arose from the use of an incremental targeting plan during the operation rather

than the more preferred approach, known as effects-based operations. The preferred approach begins with the identification of the desired effect and ends with a selection of targets and a plan designed to achieve the intended effect. The Air Force found that although this was the preferred approach used by airmen, it was not well documented in its doctrine publications and this hindered its efforts to convince leadership on the merits of an effects-based operational approach. Consequently, four Air Force doctrine publications are being revised. For instance, the draft publications state that commanders must be prepared to cope with political and diplomatic constraints that may affect the planning and execution of strategic attack operations and provide some suggestions to help meet these challenges. In addition, the Joint Chiefs of Staff is considering many of the Air Force's doctrinal issues, such as targeting, strategic attack, and effects-based operations, as part of its doctrine review and development process. Information on other issues being addressed within Air Force and joint doctrine can be found in appendix IV.

Joint Chiefs of Staff Takes Action to Remedy Doctrinal Issues

In the closing days of Operation Allied Force, the Secretary of Defense directed the Chairman of the Joint Chiefs of Staff to identify the lessons learned from the operation that were most critical to future joint operations. About 300 individual responses from the unified commanders, military services, defense agencies, and defense offices were received. The responses encompassed a wide variety of both issues and observations pertaining to logistics, personnel, communications, intelligence, as well as other areas. We identified 26 issues that pertained to doctrine.¹⁴

For the past year, the Joint Staff has been working to resolve these issues. Our analysis of the issues and actions taken thus far fell into three broad categories:

- Instances where doctrine was found to be valid and not the root of the problem. In many of these cases, doctrine that addressed the situation existed but was not followed or implemented. In several cases, training was the remedial action recommended. For example, one issue involved coordination problems between services in identifying in-theater sources of common supplies. The Joint Staff found that joint doctrine for logistics adequately assigned responsibility for this function, but it was not properly

¹⁴ Either the issue or the problem, as stated, identified a shortcoming or gap in doctrine or the remedial action taken to correct the problem involved developing or revising doctrine.

implemented. The Joint Staff will monitor the activity during an upcoming training exercise.

- Instances where gaps or shortcomings in doctrine were found. In these cases, the remedial action taken was to revise or develop doctrine to address the issue. For example, because commanders did not have adequate information on the status of shipped items, their ability to manage resources was impeded. Twenty-six joint doctrine publications have been revised to ensure that the commanders receive timely and complete resource data.
- Instances where DOD has not fully resolved the issue. In some of these cases, DOD will need the involvement of NATO to resolve the issue. For example, the Joint Staff believed that doctrinal agreements between NATO members would facilitate standardization of equipment, munitions, and communications in order to minimize problems with interoperability when operating within a multinational environment. The issue was passed on to the Defense Capabilities Initiative as the preferred pathway to resolving the issue.

Information on the issues being addressed by the Joint Staff can be found in appendix V.

Observations

The NATO alliance succeeded in achieving the goals of Operation Allied Force—Yugoslavian forces were removed from Kosovo, refugees returned, and a peacekeeping force was put in place, with no allied combat fatalities. Through it all, the NATO allies stayed united and learned much about working together as a combat force.

These achievements, though, did not come easily, and the departures from accepted U.S. military doctrine that we described in this report were troubling for many U.S. military commanders and planners involved in the operation. DOD has made efforts to address these and other issues through revisions in its doctrine, and many activities are underway in DOD and the services to study these issues and adjust military doctrine. Nevertheless, we are providing two observations for both the executive and legislative branches to consider about the nature of conducting military operations in a multinational environment.

- The challenges of dealing with the constraints of working within a multinational environment may not be completely resolved through the development of new joint multinational operations doctrine and revisions to joint and service doctrine. These revisions to doctrine will likely not be

able to provide conclusive solutions to these issues because each multinational operation will differ according to the nations that participate and the extent of their interests.

- Future multinational operations, particularly those where vital interests are not at stake, will likely continue to emphasize avoiding collateral damage and multinational force casualties. These concerns will likely weigh as heavily in the decision-making process as achieving the military objectives, and therefore, military commanders of multinational operations should not expect to always apply decisive military force with a strict adherence to military doctrine. As a result, to balance the variety of interests and concerns that arise during multinational operations, these operations may not be conducted as effectively or efficiently as operations that more closely follow U.S. military doctrine, which may lead to higher costs.

Agency Comments and Our Evaluation

In written comments on a draft of this report, DOD concurred with the contents of the report. DOD also provided technical comments, which we incorporated where appropriate. The comments are presented in appendix VI.

Scope and Methodology

To determine the significant departures from U.S. military doctrine in Operation Allied Force and the reasons the departures occurred, we reviewed DOD's *Kosovo/Operation Allied Force After-Action Report*, the Air Force's *The Air War Over Serbia: Aerospace Power in Operation Allied Force* report, the U.S. European Command's *Joint After-Action Report*, and various after-action briefings from organizations that participated in the operation. We also examined our reports as well as those from the Congressional Research Service and the Center for Naval Analysis. We interviewed over 50 senior- and mid-level leaders of Operation Allied Force, who were involved in planning, operations, and intelligence areas, from the U.S. European Command; U.S. Air Forces, Europe; Joint Task Force Noble Anvil; and NATO's Combined Air Operations Center. We included in these interviews senior leaders and squadron commanders from the U.S.S. *Theodore Roosevelt* battle group and six Air Force air expeditionary wings. The officers interviewed ranged in rank from general/admiral to lieutenant colonel/commander and were either active-duty or retired from the military. We solicited from each interviewee his viewpoints on significant doctrinal issues that affected his unit's missions. Based on these interviews, we determined which doctrinal issues were cited most frequently as adversely affecting the conduct of Operation Allied Force. We also interviewed staff from DOD's Balkans

Task Force. In addition, we reviewed current and draft joint, Air Force, and Navy doctrine publications. For this analysis of doctrinal issues from Operation Allied Force, we reviewed U.S. participation in the NATO alliance's operation. Therefore, our focus was on U.S. joint and service doctrine only.

To determine the status of Operation Allied Force lessons learned, we collected and reviewed the lessons learned collected by the Joint Chiefs of Staff's Joint Exercise and Assessment Division, which was based on submissions from the military services, unified commanders, defense agencies, and other defense organizations. The Joint Exercise and Assessment Division also provided us with information regarding the actions taken and status of each of the lessons learned. We also collected and reviewed materials prepared by the Air Force regarding its assessment of its participation in Operation Allied Force and the implications on doctrine. The Navy Warfare Development Command and the Joint Forces Command provided brief summaries of their doctrine-related issues resulting from U.S. participation in Operation Allied Force. We recently issued a report on the Army's lessons learned from its participation in Operation Allied Force – including actions taken to revise doctrine.¹⁵ The Marine Corps, although it had submitted several lessons learned to the Joint Chiefs of Staff, made no changes to its doctrine based specifically on its experience in Operation Allied Force. We did not assess the appropriateness of the actions taken on the doctrinal issues or the speed in which the recommended changes to doctrine were being implemented.

We conducted our review from June 2000 through May 2001 in accordance with generally accepted government auditing standards.

As agreed with your office, unless you publicly announce the contents of this report earlier, we will not distribute it until 15 days from the date of this report. At that time, we will send copies of this report to the Honorable Donald H. Rumsfeld, Secretary of Defense; the Honorable James G. Roche, Secretary of the Air Force; the Honorable Gordon R. England, Secretary of the Navy; and the Honorable Mitchell E. Daniels, Jr., Director of the Office of Management and Budget. We will also make copies available to others upon request.

¹⁵ *Kosovo Air Operations: Army Resolving Lessons Learned Regarding the Apache Helicopter* (GAO-01-401, Mar. 2, 2001).

Please contact me at (757) 552-8111 if you or your staff have any questions concerning this report. GAO contacts and staff acknowledgments are listed in appendix VII.

A handwritten signature in black ink, reading "Neal P. Curtin". The signature is written in a cursive style with a large, stylized "N" and "C".

Neal P. Curtin
Director
Defense Capabilities and Management

Appendix I: Timeline of Major Events Leading Up to and Including Operation Allied Force

1998	
Early March	The situation in Kosovo began to deteriorate when Yugoslavian security forces launched a series of strikes to suppress the growing Kosovar insurgent movement known as the Kosovo Liberation Army. During these strikes, the Yugoslavians used excessive force and terrorized the Kosovar civilian population.
Mar. 31	The United Nations adopted Security Council Resolution 1160, condemning the excessive use of force by Yugoslavian security forces against civilians in Kosovo and also established an embargo against Yugoslavia on arms and materials.
May	The first meeting between Yugoslavian President Milosevic and Dr. Rugova, the leader of the shadow government in Kosovo, to lay the groundwork for peace talks.
July	North Atlantic Treaty Organization (NATO) alliance began planning for a phased air operation.
August	U.S. European Command established Joint Task Force Flexible Anvil, a U.S. Navy-led command, to plan and conduct a limited air response (quick strike, limited duration operation).
September	U.S. European Command activated Joint Task Force Sky Anvil, an Air Force-led command, to plan for a phased air operation (gradually escalating military air operation, targeting Yugoslavia's air defense system, command and control sites, fielded forces, and targets of military significance first in Kosovo, then in the rest of Yugoslavia).
Sept. 23	The United Nations Security Council passed Resolution 1199, which called for a cease fire in Yugoslavia, the withdrawal of all Yugoslavian security forces, the access for nongovernmental and humanitarian organizations, and the return home of refugees and internally displaced persons.
Sept. 24	NATO defense ministers authorized an "activation warning" for limited air strikes and a phased air campaign in Kosovo.
October	U.S. European Command ordered both joint task forces to disband after they finalized U.S. planning in support of NATO planning. NATO's contingency planning efforts continued through March 1999.
Oct. 5	The United Nations released a report critical of Yugoslavia's compliance with the most recent Security Council Resolution.
Oct. 25	Based on an agreement between the Organization for Security and Co-operation in Europe and Yugoslavia, a Kosovo Verification Mission was established. The purpose of the Kosovo Verification Mission was to verify Yugoslavia's compliance with the United Nations Security Council Resolutions 1160 and 1199.
Dec. 23	The Yugoslavian army and the internal special police undertook military action near Podujevo, in northern Kosovo, along the main road linking the provincial capital Pristina to Belgrade.
1999	
Jan. 15-16	Yugoslavian security forces arbitrarily detained, killed, and mutilated unarmed Kosovo civilians in three Kosovo towns.
Jan. 30	NATO's North Atlantic Council gave NATO Secretary General Solana the authority to authorize air strikes against targets on Yugoslavian territory.
Jan. 31	Joint Task Force Noble Anvil formed.
Feb. 6	Peace talks began in Rambouillet, France, among representatives from the Yugoslavian and the Serbian provincial governments and representatives of Kosovo Albanians.
Mar. 15	Second round of peace negotiations at the Kleber Center in Paris, France. Kosovo Albanians signed the proposed agreement, but Yugoslavian government officials did not sign the agreement. Almost one-third of Yugoslavian forces were massed in and around Kosovo.
Mar. 19	The Organization for Security and Co-operation in Europe decided to withdraw the Kosovo Verification Mission from Kosovo.
Mar. 20	Yugoslavian forces launched a major offensive, driving thousands of Kosovo Albanians out of their homes – executing some and displacing many others.
Mar. 23	With no concessions from Yugoslavia, NATO Secretary General Solana directed General Clark, NATO's Supreme Allied Commander Europe, to initiate air operations in Yugoslavia.
Mar. 24	The NATO alliance air strikes, known as Operation Allied Force, began. NATO forces shot down three Yugoslavian fighter aircraft.
Mar. 25	Target list expanded to include forces and headquarters in Kosovo.
Mar. 26	Massive group of refugees fled to Albania.

**Appendix I: Timeline of Major Events Leading
Up to and Including Operation Allied Force**

Mar. 27	U.S. F-117 downed pilot rescued.
Mar. 28	The NATO alliance authorized an expanded target list.
Mar. 30	Strikes commenced against targets throughout the Serbian republic of Yugoslavia.
Mar. 31	Three U.S. soldiers captured near Macedonian border.
Apr. 1	Bombers began attacking Yugoslavian forces in Kosovo.
Apr. 3	First NATO force strike on Belgrade –Yugoslavian and Serbian interior ministries destroyed.
Apr. 6	U.S.S. <i>Theodore Roosevelt</i> commenced attack sorties.
Apr. 8	Targeting began against mobile targets in Kosovo.
Apr. 13	NATO alliance requested 300 additional U.S. aircraft. Deployment order issued for Task Force Hawk (a deployment of Army Apache helicopters and supporting equipment and personnel). At NATO's North Atlantic Council Ministerial meeting, the alliance defined the five requirements for the end of the air campaign.
Apr. 14	Collateral damage against a civilian convoy.
Apr. 21	NATO forces struck Serbian headquarters and President Milosevic's private residence. First Task Force Hawk Apache helicopters arrived in Tirana, Albania.
Apr. 23	NATO 50th Anniversary Summit began in Washington, D.C. – alliance members stated the conditions that would bring an end to the air campaign and announced that the air campaign will intensify.
Apr. 26	All Task Force Hawk Apache helicopters in Tirana, Albania.
May 1	U.S. F-16 downed, pilot rescued; NATO's North Atlantic Council approved an expanded target list.
May 2	Three U.S. soldiers released by Yugoslavian President Milosevic.
May 5	Army Apache helicopter crashed during training, both crewmen killed.
May 7	NATO alliance planes accidentally hit Chinese Embassy in Belgrade.
May 13	Unintended civilian casualties in Korisa.
May 14	The use of U.S. cluster bomb units was suspended.
May 23	The NATO alliance began bombing campaign of Yugoslavian electrical grid.
May 27	President Milosevic and our other Yugoslavian leaders were indicted by the United Nations War Crimes Tribunal for crimes against humanity.
May 30	Yugoslavs attacked Kosovo Liberation Army on Mount Pastrok near Albanian border; unintended civilian casualties during bridge attack in Varvarin.
June 2	Use of U.S. cluster bomb units resumed.
June 3	Yugoslavian President Milosevic agreed to the NATO alliance's conditions to end air campaign.
June 7	The NATO alliance and Yugoslavian commanders failed to agree to terms of pullout from Kosovo and suspended talks. The NATO alliance intensified bombing campaign.
June 9	A military technical agreement was signed between the NATO alliance and Yugoslavian representatives.
June 10	NATO Secretary General Solana called for a suspension of NATO force air strikes.
June 20	Yugoslavian forces completely withdrew from Kosovo, leading NATO Secretary General Solana to officially end the NATO alliance's air campaign in Yugoslavia.
July 19	Joint Task Force Noble Anvil disbanded.

Appendix II: Political and Military Objectives of Operation Allied Force

To achieve consensus among alliance members, the NATO alliance had limited objectives in the conflict. The operation was not intended to take the Kosovo province away from Yugoslavia or to remove Yugoslavian President Milosevic from power. The NATO alliance used air strikes as a means to compel President Milosevic to cease the violence in Kosovo and allow all refugees to return to their homes, which would restore peace throughout the Balkan region. These goals were the basis for the NATO alliance's political and military objectives.

The NATO alliance announced Operation Allied Force's initial political and military objectives on March 23, 1999—the day before the air campaign began. The political objectives were to (1) help achieve a peaceful solution to the crisis in Kosovo by contributing to the response of the international community and (2) halt the violence and support the completion of negotiations on an interim political solution. The corresponding NATO alliance military objectives of the air campaign were to (1) halt the violent attack being committed by the Yugoslav Army and security forces, (2) disrupt their ability to conduct future attacks against the population of Kosovo, and (3) support international efforts to secure Federal Republic of Yugoslavia agreement to an interim political settlement.

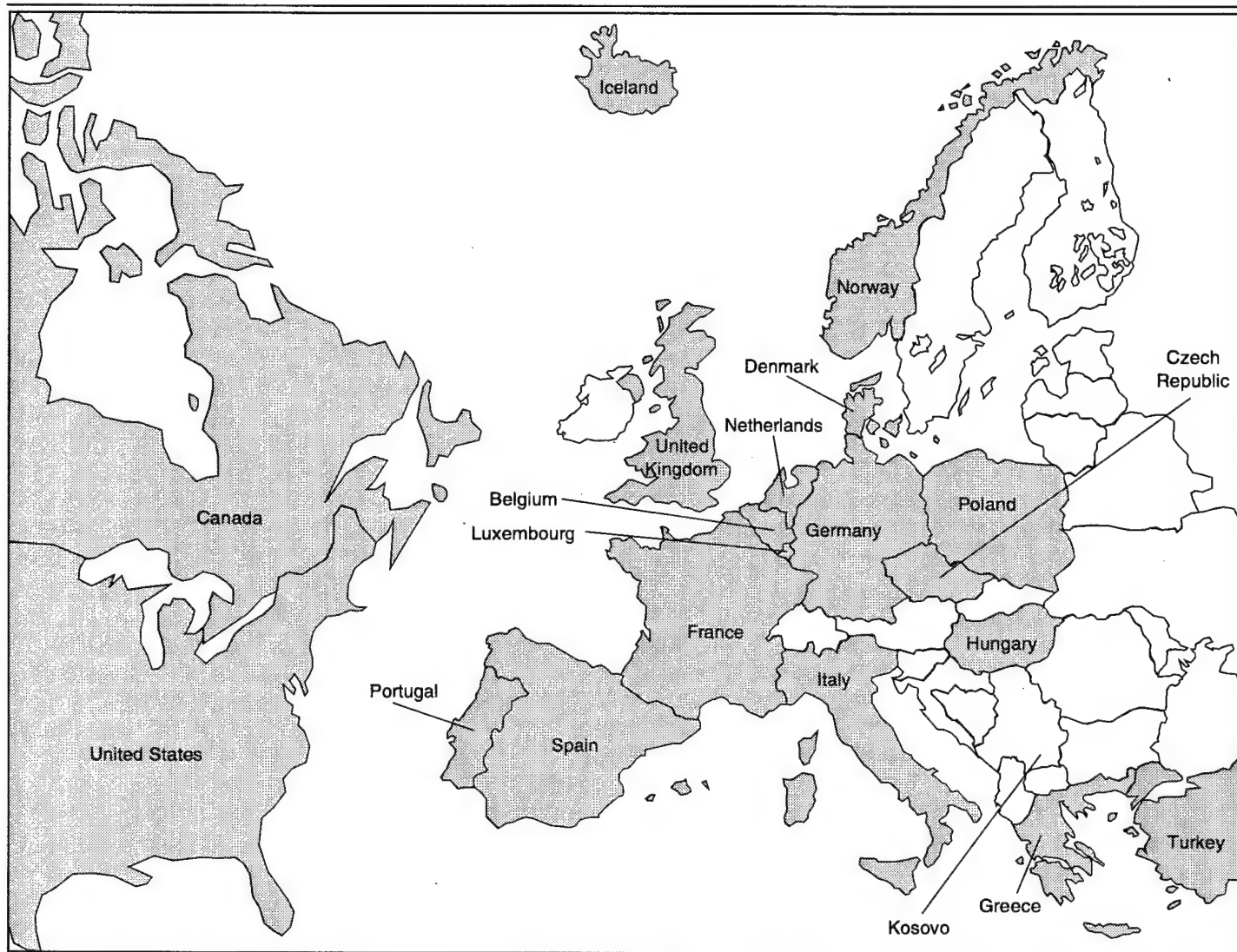
The NATO alliance expanded its objectives by defining five requirements for the end of the air campaign at the April 12, 1999, North Atlantic Council Ministerial Meeting and reiterated them during the NATO 50th Anniversary Summit on April 23, 1999. The NATO alliance stated that President Milosevic must

- ensure a verifiable stop to all military action and the immediate ending of violence and repression in Kosovo;
- withdraw from Kosovo his military, police, and paramilitary forces;
- agree to the stationing of an international military presence in Kosovo;
- agree to the unconditional and safe return of all refugees and displaced persons and unhindered access to them by humanitarian aid organizations; and
- provide credible assurance of his willingness to work for the establishment of a political framework agreement based on the Rambouillet accords in conformity with international law and the Charter of the United Nations.¹

¹ The Rambouillet accords were a planned interim agreement among representatives of the province of Kosovo, the Republic of Serbia, and the Federal Republic of Yugoslavia to provide democratic self-government, peace, and security for everyone living in Kosovo.

As a member of the NATO alliance, the United States had agreed to the objectives announced by the alliance for the air campaign. However, the United States presented its own objectives to measure the progress in achieving the NATO alliance objectives, although the U.S. objectives were subordinate to the alliance's objectives. President Clinton made a statement in the afternoon of March 24, 1999, stating that the United States had three objectives for its participation in the air strikes. The objectives were (1) to demonstrate the seriousness of NATO's opposition to aggression and its support for peace; (2) to deter President Milosevic from continuing and escalating his attacks on helpless civilians by imposing a price for those attacks; and (3) to damage, if necessary, Serbia's capability to wage war against Kosovo in the future by seriously diminishing its military capability. That evening, U.S. Secretary of Defense Cohen stated that the U.S. military objectives were to deter further action against the Kosovars and to diminish the ability of the Yugoslavian army to continue those attacks if necessary.

Appendix III: NATO Member Nations



Source: NATO.

Appendix IV: Major Doctrine Issues Surfaced From Air Force Studies

The Air Force conducted two assessments of its participation in Operation Allied Force. These assessments identified a number of issues that needed to be addressed in Air Force and joint doctrine. As shown in table 2, the revisions to doctrine publications have begun.¹ In a number of cases, the Joint Staff is considering the impact of these issues on joint doctrine as part of its normal doctrine review and development process.

Table 2: Status of Major Doctrine Issues Surfaced From Air Force Studies

Effects-based operations	
Issue	Competing objectives, conflicting views, and political and senior military leadership involvement in the targeting process led to an incremental, phased plan. As a result, airmen had difficulty applying the concept of effects-based planning and strategy. Additionally, the lack of written doctrine restricted their efforts to discuss the merits of this approach with senior officials.
Resolution	A discussion of effects-based operations inserted in four Air Force doctrine publications— <i>Air Warfare</i> , <i>Strategic Attack</i> , <i>Space Operations</i> , and <i>Information Operations</i> . The Joint Staff will consider this issue during its normal doctrine review and development process. Several joint publications that could be affected are <i>Joint Operations</i> (being revised), <i>Command and Control for Joint Air Operations</i> (being revised), <i>Targeting</i> (draft), and <i>Strategic Attack</i> (draft).
Mass and economy of force and parallel operations	
Issue	The principles of mass and economy of force were difficult to apply. This was partially due to a lack of an effects-based plan but also because precision weapons might reduce the number of weapons needed to achieve a desired effect and allow for parallel operation. Doctrine does not reflect the changing reality precision weapons offer.
Resolution	Revise the discussion of the principles of mass and economy of forces to encompass the changing balance between the quantity and quality of the force in achieving mass. Revisions are being made in <i>Air Force Basic Doctrine</i> . The Joint Staff will consider this issue during its normal doctrine review and development process. Several joint publications that could be affected are <i>Command and Control for Joint Air Operations</i> (being revised), <i>Targeting</i> (draft), and <i>Strategic Attack</i> (draft).

¹Revisions may still be in draft and not yet be available in the published versions.

**Appendix IV: Major Doctrine Issues Surfaced
From Air Force Studies**

Operating in a military operation other than war	
Issue	Senior political and military leaders considered Operation Allied Force as a military operation other than war, while airmen sought to apply conventional airpower doctrine. This highlighted the need to strengthen doctrine for military operations other than war.
Resolution	Revise the discussion and guidance throughout Air Force doctrine publication— <i>Military Operations Other Than War</i> . This issue will also be included in the <i>Aerospace Commander's Handbook</i> .
Air superiority	
Issue	The advent of stealth aircraft, standoff precision weapons, and the experience of airpower-only operations challenged the traditional concept and achievement of air superiority.
Resolution	Revise the discussion of air superiority relative to the operational environment in <i>Air Force Basic Doctrine</i> , as well as two other Air Force doctrine publications— <i>Organization and Employment of Aerospace Power</i> and <i>Strategic Attack</i> .
Space and information operations	
Issue	Airmen had difficulty differentiating between the capabilities offered by space assets and the product (information) provided by these assets. Doctrine needs to clearly establish the differences between the two and highlight the capability of space assets beyond that of information production.
Resolution	Revise the discussion of counterspace and counterinformation in <i>Air Force Basic Doctrine</i> as well as three other doctrine publications— <i>Air Warfare</i> , <i>Space Operations</i> , and <i>Information Operations</i> . The Joint Staff will consider this issue during its normal doctrine review and development process. The joint publication <i>Space Operations</i> (draft) could be affected.
Counterland operations	
Issue	Airmen had difficulty attacking dispersed enemy ground forces without friendly ground forces to shape the battlespace. Doctrine needs to address situations where friendly ground forces are not present, when the air component is the main effort in counterland battles, or when ground forces support an air component in counterland operations.
Resolution	Revise discussion on counterland operations in two Air Force doctrine publications— <i>Organization and Employment of Aerospace Power</i> and <i>Counterland Doctrine</i> .
Collateral damage	
Issue	Consideration of collateral damage was a significant concern in the target selection process. Doctrine needs to recognize the imperative and find ways to incorporate such concerns in effects-based planning.
Resolution	Revise discussion in Air Force doctrine publication— <i>Strategic Attack</i> . The Joint Staff will consider this issue during its normal doctrine review and development process. Several joint publications that could be affected are <i>Targeting</i> (draft) and <i>Strategic Attack</i> (draft).

Source: GAO analysis of Air Force information.

Appendix V: Doctrine Issues Surfaced During After-Action Reporting

Unified commanders, military services, and defense agencies and offices assessed their experiences with Operation Allied Force and identified nearly 300 issues they believed critical to future operations. For the past year, the Joint Chiefs of Staff has worked to resolve these issues. Based on our review of the issues and actions taken by the Joint Chiefs of Staff, we identified 26 issues that pertained to doctrine. By this we mean, either the issue or the problem, as stated, identified a shortcoming or gap in doctrine or the remedial action taken to correct the problem involved developing or revising doctrine.

As shown in the following table, our analysis showed that the issues fell into three broad categories: (1) instances where doctrine was found to be valid and not the root problem, (2) instances where a gap or shortcoming in doctrine was identified and doctrine is being revised,¹ and (3) instances where DOD has not fully resolved the issue.

¹ Revisions may still be in draft and not yet be available in the published versions.

**Appendix V: Doctrine Issues Surfaced During
After-Action Reporting**

Table 3: Status of Doctrine Issues Surfaced During After-Action Reporting

Instances where doctrine was determined to be valid and not the root problem.	
Sustainment and theatre distribution support	
Issue	There was little coordination between services during early phases to determine in-theater supply sources.
Resolution	Joint doctrine publications adequately address responsibility for common-user logistics with the commander's staff. Shortcoming was the result of implementation. The Joint Staff will monitor during major training exercise.
Logistics responsibilities	
Issue	The delineation of responsibility for logistical support for all phases of the operation was poorly defined.
Resolution	Joint doctrine publications adequately address authority for logistics to the commanders-in-chief and the delegation of control functions to subordinate joint commands during contingencies. No additional action is planned.
Air tasking orders	
Issue	Use of dual air tasking orders (one for the United States and one for NATO) did not effectively support joint and combined air doctrine.
Resolution	Air tasking orders are adequately addressed in joint doctrine. The implementation of air tasking orders was contrary to doctrine. No additional action is planned.
Frequency list	
Issue	This issue is classified.
Resolution	Issue is adequately addressed in joint doctrine. Lack of training was the probable cause for failure to follow doctrine, process, and procedures. There are a number of training efforts underway. The Joint Staff will continue to monitor.
Support vessel deployments	
Issue	Army support vessel deployments were made without coordination with cognizant fleet commander who was responsible for the Mediterranean and for ensuring force protection.
Resolution	Joint doctrine for logistics for these types of deployment provided sufficient guidance concerning these operations and coordination. Improper coordination was probably the result of the ad-hoc use of Army support vessels as ferries and not to unload ships. No additional action is planned.
Intelligence accessibility	
Issue	An abundance of and access to national-level intelligence information was poorly coordinated.
Resolution	Joint doctrine and supporting tactics, techniques, and procedures for intelligence exists and is valid. There are procedures and architecture in place to address this problem. No additional action is planned.
Targets	
Issue	This issue is classified.
Resolution	Joint doctrine exists and is valid. No additional action is planned.

**Appendix V: Doctrine Issues Surfaced During
After-Action Reporting**

Interoperability of alliance technology	
Issue	Concerns about the ability to integrate and/or leverage advanced technology to support military operations were identified.
Resolution	Reviewed current process and procedures and found them to be valid. No additional action planned.
Alliance spectrum management (related to frequency list)	
Issue	A central spectrum manager needed to be assigned.
Resolution	Issue is adequately addressed in joint doctrine. Lack of training was the probable cause for failure to follow doctrine, process, and procedures. There are a number of training efforts underway. The Joint Staff will continue to monitor.
Instances where gaps or shortcomings in doctrine were found	
Use of contractors on the battlefield	
Issue	When planning for the operation, there was no in-depth analysis of what support and services would be required by the commercial contractor. Planners need to be sensitive to the needs of contractors in theater because the contractors will likely ask for force protection and security.
Resolution	Joint doctrine for logistics support has been revised and now addresses the use of contractors in theater. No additional action is planned.
Expeditionary airfields systems installed and operated	
Issue	Expeditionary airfields systems were successfully installed and operated during the operation. Use of the systems provided rapid cycle aircraft recovery operations, increasing the sortie rate and improving ground traffic flow.
Resolution	Joint doctrine for engineer operations was revised in concert with Marine Corps Aviation. No additional action is planned.
Coordination of joint suppression of enemy air defense and integrated air defense systems	
Issue	At the start of the air war, there was little/no coordination due to the absence of a joint electronic warfare cell at the Combined Air Operations Center for NATO decision-making.
Resolution	During Operation Allied Force, Allied Air and Space Operations Doctrine was under development. This new doctrine establishes an appropriate electronic warfare cell at the Joint Task Force Headquarters. No additional action is planned.
Joint information management	
Issue	There was a lack of coordination and control of information flow during the operation.
Resolution	Doctrine is being revised to include specific guidance for the establishment of a joint information management board.
Information operations	
Issue	There were shortfalls in training, manning, and doctrine for information operations.
Resolution	Doctrine is being revised to address the deficiencies, manning levels have been increased, and additional emphasis has been placed on information operations training.

**Appendix V: Doctrine Issues Surfaced During
After-Action Reporting**

Intratheater in-transit visibility	
Issue	There was a lack of supporting doctrine, policy, and plans for intratheater in-transit visibility, which resulted in ad-hoc planning efforts that affected the commander's resource management capabilities. Appropriate doctrine and policies must be outlined in order to provide a solid basis for theater in-transit visibility plans.
Resolution	As the executive agent for in-transit visibility doctrine, policy, and plans, the U.S. Transportation Command began inserting appropriate definitions and language in joint publications. To date, 26 joint publications have been revised and the services are revising their publications. No additional action is planned.
Imagery intelligence	
Issue	This issue is classified.
Resolution	Joint doctrine is being developed to rectify this issue.
Joint digital network	
Issue	There were concerns with the interoperability, standardization, and flexibility of the joint digital network.
Resolution	Joint manual has been revised to address the concerns.
Fire support	
Issue	There were concerns with combined fire support.
Resolution	The issue is being addressed in joint doctrine publications.
Instances where the issue has not been fully resolved	
NATO command structure	
Issue	A more effective U.S.-NATO command structure, including access to classified information, was needed.
Resolution	Issue could not be resolved at the Joint Staff level and was passed on to U.S.-NATO working group.
Air tasking order process	
Issue	The air tasking order process did not lend itself to ensuring the speed of command needed in a rapidly developing operational environment.
Resolution	Issue passed to the Joint Staff for operations target working group for resolution.
Alliance and coalition interoperability	
Issue	Defense spending dichotomy is making interoperability problems more complex. Since U.S. policy prefers to engage alongside allies, doctrinal agreements would facilitate the standardization of equipment, munitions, and communications to minimize problems. Some of the details regarding this issue are classified.
Resolution	This issue was passed to the Defense Capabilities Initiative for corrective action. This initiative, which began in April 1999, focuses alliance members on attaining interoperability and common capabilities needed to perform the roles and missions that are outlined in NATO's new strategic concept. Though this initiative was not a direct result of Operation Allied Force, shortcomings of the operation gave the initiative additional impetus.
Allied joint doctrine	
Issue	There needs to be a more responsive process for developing joint doctrine.
Resolution	Issue being addressed through the allied joint doctrine process.

**Appendix V: Doctrine Issues Surfaced During
After-Action Reporting**

Political military interface

Issue	The interface between the political process and military planning was less than optimal.
Resolution	Issue passed to joint conventional warplans division for resolution.

NATO intelligence

Issue	This issue involved the production and dissemination of intelligence information among the allies.
Resolution	Issue was passed on to Supreme Commander, Europe, for resolution.

Interface with NATO

Issue	Deception planning with NATO was lacking.
Resolution	Issue still requires further study.

Joint broadcast system

Issue	The joint broadcast systems should continue to be used until operational forces are satisfied that the global broadcast system is fully ready to take its place.
Resolution	Issue requires further study.

Source: GAO analysis of DOD information.

Appendix VI: Comments From the Department of Defense



THE JOINT STAFF
WASHINGTON, DC

Reply ZIP Code:
20318-7000

July 23, 2001

Mr. Neal P. Curtin
Director, Defense Capabilities
and Management
US General Accounting Office
Washington, D.C 20584

Dear Mr. Curtin,

Thank you for the opportunity to review the draft GAO report, KOSOVO AIR OPERATIONS: Need to Maintain Alliance Cohesion Resulted in Doctrinal Departures, dated June 08, 2001 (GAO Code 702076/OSD Case 4011).

This is the Department of Defense (DOD) final response to this GAO draft report. We have reviewed the GAO rebuttal to our initial review and have withdrawn comments 1b and 1c. We concur with the report since you have incorporated previous DOD changes.

The Joint Staff point of contact is Lieutenant Colonel Victoria A. Calhoun, USA, J-7, (703) 697-1995.

Sincerely,

A handwritten signature in black ink that reads "HPOsman".

H. P. Osman
Major General, USMC
Director for Operational Plans
and Joint Force Development

Appendix VII: GAO Contacts and Staff Acknowledgments

GAO Contacts

William Solis (202) 512-8365
Edna Falk Curtin (202) 512-4067

Acknowledgments

In addition to those named above, Rodell Anderson, Michael Avenick, Margaret Best, Kathleen Joyce, Madelon Savaides, and Susan Woodward made significant contributions to this report.

Related GAO Products

Kosovo Air Operations: Mission Effectiveness of U.S. Air Strikes Against Fixed and Mobile Targets (GAO-01-925, forthcoming).

Kosovo Air Operations: Combat Aircraft Basing Plans Are Needed in Advance of Future Conflicts (GAO-01-461, May 29, 2001).

Kosovo Air Operations: Army Resolving Lessons Learned Regarding the Apache Helicopter (GAO-01-401, Mar. 2, 2001).

Balkans Security: Current and Projected Factors Affecting Regional Stability (GAO/NSIAD-00-125BR, Apr. 24, 2000).

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